

Listing of Claims:

1. (Previously presented) A flats mail autotraying system comprising:

a stack accumulator having means for combining multiple small stacks of mailpieces into a single large stack of mailpieces while maintaining sequence order; and

the stack accumulator also having means for transferring said large stack to a tray.

2. (Previously presented) The system of Claim 1, further comprising means for releasably engaging a tray.

3. (Canceled)

4. (Previously presented) The system of Claim 1, wherein said means for combining includes a fork lift assembly.

5. (Previously presented) The system of Claim 4, wherein said fork lift assembly is selectively raised and lowered, and is selectively positionable into and out of contact with said large stack during a fork lift cycle.

6. (Previously presented) The system of Claim 1, wherein said means for transferring includes a plurality of driven rollers.

7. (Previously presented) The system of Claim 6, wherein said means for transferring further includes a means for pushing.

8-14. (Canceled)

15. (Withdrawn) A flats mail autotraying apparatus for combining multiple small stacks of mailpieces into a single large stack of mailpieces and then transferring the large stack to a standard flats mail tray, comprising:

a stack accumulator; and

an output tray station proximate said stack accumulator;

said stack accumulator sequentially receiving a stream of small stacks of mailpieces;

said stack accumulator including means for combining said small stacks of mailpieces into said large stack in a desired sequence, and means for transferring said large stack to said tray;

said output tray station engaging an empty tray as said large stack is transferred to the tray, and releasing said tray once filled.

16. (Withdrawn) The ~~apparatus~~ system of Claim [[15]] 1, wherein said stack accumulator maintains a sequence order of the mailpieces in said large stack by placing successive small stacks on the bottom of the large stack.

17. (Canceled)

18. (Canceled)

19. (Withdrawn) The apparatus of Claim 15, wherein the means for combining includes a fork lift assembly.

20. (Withdrawn) The apparatus of Claim 19, wherein said fork lift assembly selectively lifts and drops said large stack.

21. (Withdrawn) The apparatus of Claim 20, further comprising a sensor for initiating a fork lift cycle when each of said small stacks of mailpieces advances into said sensor.

22. (Withdrawn) The apparatus of Claim 21, wherein said fork lift extends under and holds said large stack above each of said small stacks of mailpieces, retracts when said fork lift cycle is initiated, releasing said large stack onto each of said small stacks of mailpieces, lowers to a position under said large stack, advances back under said large stack, and raises to lift said large stack to complete said fork lift cycle.

23. (Withdrawn) The apparatus of Claim 15, wherein the means for transferring includes a plurality of rollers.
24. (Withdrawn) The ~~apparatus~~ system of Claim [[23]] 6, wherein said plurality of rollers includes driven bottom rollers and driven side rollers.
25. (Withdrawn) The apparatus of Claim 23, wherein said plurality of rollers includes a top roller.
26. (Withdrawn) The apparatus of Claim 25, further comprising a stack height limit sensor, said top roller being operatively connected to a pivot arm, said pivot arm raising as successive small stacks are added to said large stack, said pivot arm triggering said stack height limit sensor upon said large stack reaching a predetermined height.
27. (Withdrawn) The apparatus of Claim 26, wherein said stack accumulator transfers said large stack to said tray upon said stack height limit sensor being triggered.
28. (Withdrawn) The apparatus of Claim 27, wherein said plurality of rollers cooperate to transfer said large stack to said tray.
29. (Withdrawn) The ~~apparatus~~ system of Claim [[15]] 1, wherein said stack accumulator includes a plurality of guides.
30. (Withdrawn) The ~~apparatus~~ system of Claim 29, wherein said plurality of guides includes a side guide assembly.
31. (Withdrawn) The ~~apparatus~~ system of Claim 30, wherein said side guide assembly is retractable.
32. (Withdrawn) The ~~apparatus~~ system of Claim 30, wherein said side guide assembly includes high friction belt strips.

33. (Withdrawn) The ~~apparatus~~ system of Claim 29, wherein said plurality of guides includes a rear guide assembly.

34. (Withdrawn) The ~~apparatus~~ system of Claim 33, wherein said rear guide assembly is a flexible belt.

35. (Withdrawn) The ~~apparatus~~ system of Claim [[15]] 1, wherein said stack accumulator includes a gate.

36. (Withdrawn) The ~~apparatus~~ system of Claim [[15]] 1, wherein said stack accumulator includes a pusher arm.

37. (Withdrawn) The apparatus of Claim 15, wherein said output tray station includes a tray latch assembly.

38. (Withdrawn) The apparatus of Claim 15, wherein said output tray station includes a tray support ledge.

39. (Withdrawn) The apparatus of Claim 15, wherein said output tray station includes at least one mail guide.

40-50. (Canceled)

51. (Previously presented) The system of Claim 1, wherein the stack accumulator further comprises at least one of a side guide assembly and a rear guide assembly.

52. (Previously presented) The system of Claim 2, wherein the means for releasably engaging a tray includes a tray latch assembly and a tray support ledge.

53. (Previously presented) The system of Claim 5, further comprising a sensor for initiating the fork lift cycle when one of the small stacks of mailpieces is sensed by the sensor.

54. (Previously presented) The system of Claim 53, wherein the fork lift assembly extends under and holds the large stack above one of the small stacks of mailpieces, retracts when the

fork lift cycle is initiated, releasing the large stack onto one of the small stacks of mailpieces to create a new large stack, lowers to a position under the new large stack, advances back under the new large stack, and raises to lift the new large stack to complete the fork lift cycle.

55. (Previously presented) The system of Claim 6, wherein said plurality of rollers includes a top roller operatively connected to a pivot arm, the pivot arm raising as successive small stacks are added to the large stack, the pivot arm triggering a stack height limit sensor upon the large stack reaching a predetermined height, whereupon the stack accumulator transfers the large stack to the tray.

56. (New) A flats mail autotraying system comprising:

a stack accumulator having a fork lift assembly for combining multiple small stacks of mailpieces into a single large stack of mailpieces while maintaining sequence order;

the stack accumulator also having a plurality of rollers for transferring said large stack to a tray;

wherein the stack accumulator sequentially receives a stream of small stacks of mailpieces, and maintains a sequence order of the mailpieces in said large stack by placing successive small stacks on the bottom of the large stack.

57. (New) The system of Claim 56, wherein the stack accumulator further comprises a tray engagement assembly for releasably engaging a tray, wherein the tray engaging assembly engages an empty tray as the large stack is transferred to the tray, and releases the tray once filled.

58. (New) The system of Claim 56, further comprising a sensor for initiating a fork lift cycle when each of said small stacks of mailpieces advances into said sensor.

59. (New) The system of Claim 58, wherein said fork lift extends under and holds said large stack above each of said small stacks of mailpieces, retracts when said fork lift cycle is initiated, releasing said large stack onto each of said small stacks of mailpieces, lowers to a position under said large stack, advances back under said large stack, and raises to lift said large stack to complete said fork lift cycle.
60. (New) The system of Claim 56, wherein the plurality of rollers includes driven bottom rollers and driven side rollers.
61. (New) The system of Claim 60, wherein the plurality of rollers further includes a top roller.
62. (New) The system of Claim 61, further comprising a stack height limit sensor, wherein the top roller is operatively connected to a pivot arm, and wherein the pivot arm raises as successive small stacks are added to the large stack to trigger the stack height limit sensor upon the large stack reaching a predetermined height.
63. (New) The system of Claim 62, wherein the stack accumulator transfers the large stack to the tray upon the stack height limit sensor being triggered.
64. (New) The system of Claim 56, wherein the stack accumulator further includes a plurality of guides.
65. (New) The system of Claim 64, wherein the plurality of guides includes a retractable side guide assembly.
66. (New) The system of Claim 65, wherein the retractable side guide assembly includes high friction belt strips.
67. (New) The system of Claim 64, wherein the plurality of guides includes a rear guide assembly.
68. (New) The system of Claim 67, wherein the rear guide assembly is a flexible belt.

69. (New) The system of Claim 56, wherein the stack accumulator includes a gate, wherein the gate is closed during the accumulation of the large stack, and opens during the transfer of the large stack to the tray.

70. (New) The system of Claim 56, wherein the stack accumulator includes a pusher arm which pushes on the large stack during the transfer of the large stack to the tray.

71. (New) The system of Claim 57, wherein the tray engagement assembly includes a tray latch assembly, a tray support ledge, and at least one mail guide.